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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,356	01/23/2002	Fatollah Youssefifar	20272/0700	3388

30678 7590 02/23/2005

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EXAMINER

DUNWOODY, AARON M

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,356

Applicant(s)

YOUSSEFIFAR, FATOLLAH

Examiner

Aaron M Dunwoody

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-5, 7-10 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 5406983, Chambers et al.

In regards to claim 1, Chambers et al discloses a coupling for a pipe, the coupling comprising a housing (12) of a relatively rigid plastics material, the housing having a bore therein; a retainer (28) for retaining the pipe within the housing; and a layer of a relatively deformable material (26) molded onto at least a part of both an inner and outer surface of the housing wherein the layer on the inner surface being is in sealing engagement with an outside of the pipe.

Note, a comparison of the recited process with the prior art processes does NOT serve to resolve the issue concerning patentability of the product. In re Fessman, 489 F2d 742, 180 U.S.P.Q. 324 (CCPA 1974). Whether a product is patentable depends on whether it is known in the art or it is obvious, and is not governed by whether the process by which it is made is patentable. In re Klug, 333 F2d 905, 142 U.S.P.Q. 161 (CCPA 1964). In an ex parte case, product-by-process claims are not construed as being limited to the product formed by the specific process recited. In re Hirao et al., 535 F2d 67, 190 U.S.P.Q. 15, see footnote 3 (CCPA 1976). Therefore, a layer of a

relatively deformable material **molded** onto at least a part of both an inner and outer surface of the housing is given little patentable weight.

In regards to claim 3, Chambers et al discloses the layer on the inner surface providing a tapering surface.

In regards to claim 4, Chambers et al discloses the retainer being formed integrally with the housing.

In regards to claim 5, Chambers et al discloses the retainer including at least one resilient catch member adapted to engage a projection on the pipe.

In regards to claim 7, Chambers et al discloses the layer on the outer surface including a part (above 16) formed on external ledge of the housing to provide a seal with a cooperating member (a hand).

In regards to claim 8, Chambers et al discloses the layer on the outer surface including a part (above 16) that provides a manual gripping region.

In regards to claim 9, Chambers et al discloses the layer on the inner and outer surfaces being continuous with one another.

In regards to claim 10, Chambers et al discloses the deformable material being an elastomeric material.

In regards to claim 13, Chambers et al discloses a method of forming a coupling comprising the steps of injecting a first material of a relatively hard plastics material to form a housing of the coupling with an integral retainer; and subsequently injecting a second, softer, deformable material to form a layer on the harder material both on an inside and outside of the housing.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 4923227, Petty et al in view of Chambers et al.

In regards to claim 1, Petty et al discloses a coupling for a pipe, the coupling comprising a housing (1) of a relatively rigid plastics material, the housing having a bore therein; and a retainer (9) for retaining the pipe within the housing. Petty et al does not disclose a layer of a relatively deformable material molded onto at least a part of both an inner and outer surface of the housing. Chambers et al teaches a layer of a relatively deformable material (26) molded onto at least a part of both an inner and outer surface of the housing (12) "to provide a coupling which is both corrosion resistant and capable of providing good sealing characteristics" (col. 3, lines 20-23). As Chambers et al relates to tubular members for use with pipes to corrosion-resistant couplings, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a layer of a relatively deformable material molded onto at least a part of both an inner and outer surface of the housing to provide a coupling which is both corrosion resistant and capable of providing good sealing characteristics, as taught by Chambers et al.

In regards to claim 3, Chambers et al discloses the layer on the inner surface providing a tapering surface.

In regards to claim 4, Petty et al discloses the retainer being formed integrally with the housing.

In regards to claim 5, Petty et al discloses the retainer including at least one resilient catch member adapted to engage a projection on the pipe.

In regards to claim 6, Petty et al discloses the pipe having a corrugated external surface, and wherein the catch member is adapted to engage between the corrugations.

In regards to claim 7, Chambers et al discloses the layer on the outer surface including a part formed on external ledge of the housing to provide a seal with a cooperating member.

In regards to claim 8, Chambers et al discloses the layer on the outer surface including a part that provides a manual gripping region.

In regards to claim 9, Chambers et al the layer on the inner and outer surfaces being continuous with one another.

In regards to claim 10, Chambers et al the deformable material being an elastomeric material.

In regards to claim 11, Petty et al in view of Chambers discloses a coupling for connecting one end of a corrugated pipe to a cooperating member, the coupling comprising a rigid housing of tubular shape having two spring catches on opposite sides adapted to engage between corrugations on an outside of the pipe inserted within the coupling; and a continuous layer of a deformable material bonded with both an inside

Art Unit: 3679

and outside of the housing to form an internal, tapering sealing surface adapted to seal with an outside of the pipe, an external annular sealing member, adapted to seal with the cooperating member, and an external gripping region.

In regards to claim 12, Petty et al in view of Chambers et al an assembly of a corrugated pipe and a coupling, the coupling comprising a housing of a relatively rigid plastics material, the housing having a bore therein; retaining means for retaining the pipe with the housing; and a layer of a relatively deformable material molded onto at least a part of both an inner and outer surface of the housing, wherein the layer on the inside surface forms a seal with an outside surface of the pipe in the bore.

In regards to claim 13, Chambers et al discloses a method of forming a coupling comprising the steps of injecting a first material of a relatively hard plastics material to form a housing of the coupling with an integral retainer; and subsequently injecting a second, softer, deformable material to form a layer on the harder material both on an inside and outside of the housing.

In regards to claim 14, Petty et al discloses the retainer including at least one resilient catch member adapted to engage a projection on the pipe.

In regards to claim 15, Petty et al discloses the retainer including at least one resilient catch member adapted to engage a projection on the pipe.

In regards to claim 16, Petty et al discloses the retainer including at least one resilient catch member adapted to engage a projection on the pipe.

Response to Arguments

Art Unit: 3679

Applicant's arguments filed 11/29/2004 have been fully considered but they are not persuasive. The Applicant argues that none of the embodiments Chambers show the shell extending over the stress-bearing sleeve. The Examiner disagrees. Figure 1 clearly illustrates the shell extending over the stress-bearing sleeve.

The Applicant argues Chambers does not teach a housing of rigid/hard plastics, nor the use of deformable material that is molded over inner and outer surfaces of the housing wherein the inner layer forms a seal with a pipe. The Examiner disagrees.

Chambers recites:

Materials contemplated for use in forming stress-bearing sleeve member 12 include steel, iron, aluminum and other metals for this purpose and, in addition, high performance composites. Of the composites materials contemplated for use in sleeve member 12, those which employ woven or nonwoven fabrics or mats of glass, ceramic or synthetic fibers are particularly preferred. For use with oil field pipes and tubulars, steel is particularly preferred.

Referring again to FIG. 1, coupling 10 also includes a fiber-filled polymeric composite shell 26 having a first internally threaded portion 28 at a first end thereof, and a second internally threaded portion 30 at a second end thereof. Composite shell 26 is molded to sleeve member 12, by injection molding, so as to be coaxially aligned and in close conforming contact with at least a substantial portion of interior surface 22 of said sleeve member 12. As is preferred, and in contrast with tubular coatings technology, composite shell 26 will have a thickness of greater than about 0.04 inches and, as is particularly preferred, composite shell 26 will have a thickness in excess of 0.10 inches.

Art Unit: 3679

Accordingly, it is an object of the present invention to provide a corrosion-resistant coupling for use with tubular members having threaded ends.

It is another object of the present invention to provide a coupling which will act as a galvanic corrosion insulator for coupling tubings of dissimilar metals.

It is a further object of the present invention to provide a coupling which will provide the mechanical properties necessary to provide good service life in oil field applications.

It is yet another object of the present invention to provide a coupling which is both corrosion resistant and capable of providing good sealing characteristics.

Therefore, Chambers meets the claim limitations.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3679

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Dunwoody whose telephone number is 703-306-3436. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P Stodola can be reached on 703-306-5771. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Aaron M Dunwoody
Examiner
Art Unit 3679

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